Application No.: 10/710,823
Amdt. Dated August 29, 2007
Final Office Action mailed May 29, 2007

REMARKS

Claims 1-15 and 18-29 are pending in the application. Claim 11 is objected to under 37 CFR 1.75(c). Applicants opt to cancel claim 11. Withdrawal of the outstanding objection is requested.

Claims 1-7, 11-14, 18-19 and 24-29 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,785,641 ("Huang") in view of the Banks reference ("Banks") and/or under 35 U.S.C. §103(a) as being unpatentable over Huang, Banks, and in further view of the Landmark PROFILE reference ("Landmark"). Applicants respectfully traverse these rejections because a *prima facie* case of obviousness has not been presented.

To establish *prima facie* obviousness, all claim limitations must be taught or suggested by the prior art. *In re Royka,* 490 F.2d 981, 985 (CCPA 1974). Presently, the combination of references cited in the Final Office Action fails to teach or suggest all of the elements of independent claims 1 and 29. To highlight the deficiency of the cited references to establish obviousness, Applicants propose to amend independent claims 1 and 29. Applicants also propose amending one or more of the claims to more clearly and carefully articulate those steps which distinguishes the invention from the prior art.

Nothing in Huang suggests the steps of parsing and interpreting BHA source data to produce data packets corresponding to BHA graphics components, and including instructions for animation, as required by amended Claim 1. Huang also fails to teach or suggest interpreting BHA source data to "correlate the data packets with corresponding BHA graphics components." Applicants note that Huang is directed to a mathematical analysis for simulating the dynamic response of a drilling tool assembly. Huang is not directed to displaying the BHA (using vector graphics or otherwise). Not surprisingly, the cited portions of columns 6, 16 and 17, do not teach or suggest parsing the BHA source data to produce graphics data packets, or interpreting the data packets to correlate the graphics data packets to corresponding BHA graphics components. Any construed manipulation of BHA source data in these cited portions would be directed to geometric and material parameters for a mathematical analysis (not for display of the BHA).

According to Huang, the "output data" (of the analysis) may be presented in the form of a visual representation. This does not mean that the described manipulation of data (*i.e.*, any parsing or interpreting of parameters for the mathematical analysis) produces output data that are "graphics data packets corresponding to BHA graphics components." It only means that the

6

Application No.: 10/710,823
Amdt. Dated August 29, 2007
Final Office Action mailed May 29, 2007

manipulation of data in Huang results in "output data" that may be "visually represented." In fact, Huang then teaches that "the means used for visually displaying outputs of simulated drilling is a matter of convenience for the system designer..." FIG. 12 does, indeed, provide an example of visual representation, but Huang does not provide the steps leading to that visual representation, as required by claim 1. It also appears that the "output data" in FIG. 12 is provided in the text box within the drawing; it is not embodied in the graphics display (which is provided by "means convenient to the system designer").

Perhaps, the Banks reference provides some means for simulation as mentioned in Huang, which may be "convenient for the system designer." This means for simulation, however, cannot be merely appended to any "manipulation" or "parsing and interpreting" of source data in Huang. The "output data" must be amenable to the means for simulation in Banks. There is no indication or suggestion that this is the case or how it could be done. Thus, the teaching of Banks is not combinable with the cited portions of Huang to provide a workable method for displaying a graphical representation of the BHA using vector graphics. Contrary to the suggestion made in the Office Action, it would not "have been obvious to combine the BHA display method of Huang with the simulation display method of Banks," because Huang fails to provide a relevant BHA display method or steps preceding the display, to allow the proper combination and integration.

Furthermore, Banks also fails to disclose the concept of using vector graphics to display, including parsing the source data to produce graphics data packets corresponding to BHA graphics components, including instructions for animation," or interpreting the graphics data packets to correlate the graphics data packets with corresponding BHA graphics components. Although graphics techniques and animation are discussed on page 35 of Banks, parsing BHA source data to produce graphics data packets, including instruction for animation or interpreting BHA source data to correlate data packets with corresponding BHA graphics components, are not. Thus, neither Huang nor Banks teaches or suggests "parsing and interpreting BHA source data" or correlating the data packets, as required by amended claim 1.

Accordingly, the combination of references fails to produce all of the elements of claim 1 or 29. Claims 1-10, 12-15, 18-28 and independent claim 29 are, therefore, not obvious in view of Huang and Banks and/or Landmark. In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance.

7

Application No.: 10/710,823
Amdt. Dated August 29, 2007
Final Office Action mailed May 29, 2007

No fee is believed to be due at this time. If a Petition is required, this statement shall serve as Applicants' Petition to the USPTO. The Commissioner is hereby authorized to charge any additional fees or credit any overpayments related to this response to Deposit Account No. **190610 (19.0355)**, maintained by Schlumberger Technology Corporation.

The undersigned is available for consultation at any time, if the Examiner believes such consultation may expedite the resolution of any issues.

Respectfully submitted,

Date: _August 29, 2007_

Alberto Q. Amatong, Jr. /with permission by
                                                    Linda Sengvory
Alberto Q. Amatong, Jr.
Registration No. 41,580
The Amatong Law Firm, PLLC
P.O. Box 70889
Houston, Texas 77270-70889
Telephone: (832) 333-5547
Facsimile: (866) 676-7879
ATTORNEY FOR APPLICANTS

8